REMARKS

Claim Rejections 35 U.S.C. §103

Claims 1-22 are rejected, under 35 U.S.C. §103(a), as being allegedly unpatentable by the alleged Applicant's Admitted Prior Art (AAPA) in view of Maleck (U.S. 6,681,281) (hereinafter Maleck) and Wilcox (U.S. 6,185,634) (hereinafter Wilcox). Applicant respectfully traverses in view of the following.

Independent Claim 14 recites preparing disk transaction information by packaging a plurality of data structures comprising the disk transaction, as claimed. The rejection relies on Applicant's own background to show this limitation. Applicant respectfully submits that the rejection is selecting passages out of context to fit the recited claim limitation. For example, the background of the instant application discloses that the preparation includes generating and arranging the transaction information, including PRDs and CPBs for the transaction (see instant application, page 4, lines 15-17). Once the disk controller has the necessary transaction information, the disk controller issues commands to start up the disk drive mechanism and implement the disk transaction (see instant application, page 4, lines 22-24).

Accordingly, the conventional method requires the start up to be complete prior to the preparation and generation of the transaction information. As such, Applicant respectfully submits that it is improper to pick and choose passages out of context without considering the teachings of the entire reference. Applicant

wishes to respectfully remind the Examiner that prior art must be considered in its entirety, including disclosures that teach away from the claims (see MPEP §2141.02; *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)).

More specifically, Applicant respectfully submits that the disclosure in the background of the instant application cannot be considered in isolation and out of context but must be considered in its entirety. The alleged AAPA fails to teach or suggest preparing disk transaction information by packaging a plurality of data structures comprising the disk transaction in the claimed fashion because the background requires the start up to be completed whereas the recited limitations prepare the disk transaction information before the completion of the start up, as claimed. The background of the instant application teaches away from the recited limitation because the preparation of disk transaction information is performed after the start up is completed.

The rejection admits that the alleged AAPA in view of Maleck fails to teach that upon receiving a request for a disk I/O, transferring a command causing the startup of a disk drive, as claimed. The rejection relies on Wilcox. Applicant respectfully traverses in view of the following.

Wilcox discloses a program including instructions to generate data and store that data on the disk drive (see Wilcox, col. 3, lines 43-44). The DMA controller controls the transfer of the data block from the host memory to the disk

drive (see Wilcox, col. 3, lines 46-48). For example, each DMA monitors hold data representing the current state of the DMA transfer being controlled or monitored by that port (see Wilcox, col. 5, lines 4-7). To control a DMA burst transfer, a DMA request is sent to the arbitrator circuit (see Wilcox, col. 5, lines 8-10) and the output terminal provides data to the DMA engine (see Wilcox, col. 5, lines 17-19) to perform a DMA burst transfer (see Wilcox, col. 5, lines 27-28). When the burst transfer is over, the data in the selected one of the DMA monitor is updated (see Wilcox, col. 5, lines 38-40).

Accordingly, Wilcox discloses a method for controlling a DMA burst transfer. Controlling a DMA burst transfer, as disclosed by Wilcox, fails to teach or suggest a command for starting up a disk drive, as claimed. As such, Wilcox fails to explicitly teach or suggest that upon receiving a request for a disk I/O, transferring a command causing a startup of a disk drive, as claimed.

The rejection admits that the alleged AAPA in view of Maleck fails to teach subsequent to transferring the command causing the start up and before the completion of the start up, as claimed preparing disk transaction information. The rejection relies on Wilcox. Applicant respectfully traverses in view of the following.

Wilcox discloses that when in the idle state a multiplexer is used (see Wilcox, col. 11, lines 41-46) to add a size parameter to the first address (see Wilcox, col. 11, lines 48-49). The address generated by the first adder is the memory address of the end of the first sector's worth of data and when this

address is generated during the DMA transfer, there is sufficient data in the memory for a sector to be written to the disk drive (see Wilcox, col. 11, lines 52-56). As a result, when the START signal is asserted at the completion of writing the DMA transfer parameters into the appropriate monitor registers in the DMA monitor, the monitor state machine enters the load state for loading the trigger address into the trigger address register (see Wilcox, col. 11, lines 63-66 and col. 12, lines 1-2). The trigger address causes the monitor state machine to enter a trigger state for producing the address of the beginning of the next sector's worth of data to be stored in the memory (see Wilcox, col. 12, lines 7-13).

Accordingly, Wilcox discloses loading the trigger address that is the address of the beginning of the next sector's worth of data to be stored in the memory. The loading, as disclosed by Wilcox, occurs when the START signal is asserted at the completion of writing the DMA transfer parameters and not subsequent to transferring the command causing the start up and before the completion of the start up, as claimed. Moreover, as presented and discussed above, controlling a DMA burst transfer and loading the trigger address for writing the DMA, as disclosed by Wilcox, differ from a command causing the start up, as claimed. As such, Wilcox also fails to teach or suggest subsequent to transferring the command causing the start up and before the completion of the start up, as claimed, preparing disk transaction information.

Furthermore, the rejection admits that the alleged AAPA in view of Maleck fails to teach that the disk controller includes a plurality of bypass registers, as

claimed. The rejection relies on Wilcox. Applicant respectfully traverses in view of the following.

Wilcox discloses a memory component within a disk adapter (see Wilcox, Figure 1, element 56 and col. 3, lines 35-40). A memory component, as disclosed by Wilcox, fails to explicitly teach a bypass register, as claimed. Moreover, Wilcox discloses only one memory component and not a plurality of bypass registers, as claimed.

Accordingly, the alleged AAPA alone or in combination with Maleck and Wilcox fails to render independent Claim 14 obvious, under 35 U.S.C. §103(a). Independent Claims 1 and 9 recite limitations similar to that of Claim 14 and are patentable for similar reasons. Dependent claims are patentable by virtue of their dependency. As per Claims 2-5, 7-8, 10-11, 13, 15-17 and 19-20, Applicant respectfully asserts that these claims overcome the alleged AAPA for reasons discussed above.

As such, allowance of Claims 1-22 is earnestly solicited.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejections under 35 U.S.C. §103.

CONCLUSION

In light of the above listed remarks, reconsideration of the rejected Claims 1-22 is requested. Based on the arguments presented above, it is respectfully submitted that Claims 1-22 overcome the rejections of record and, therefore, allowance of Claims 1-22 is earnestly solicited.

Please charge any additional fees or apply any credits to our PTO deposit account number: 50-4160.

Respectfully submitted,
MURABITO, HAO & BARNES LLP

Dated: 7-22, 2008

/Amir A. Tabarrok/
Amir A. Tabarrok
Registration No. 57,137

MURABITO, HAO & BARNES LLP
Two North Market Street
Third Floor
San Jose, California 95113